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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,239	08/22/2003	Stefan Bertil Ohlsson	2002B117/2	9391

23455 7590 07/10/2006

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EXAMINER	
BRUENJES, CHRISTOPHER P	
ART UNIT	PAPER NUMBER
1772	

DATE MAILED: 07/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/646,239	OHLSSON, STEFAN BERTIL	
	Examiner	Art Unit	
	Christopher P. Bruenjes	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *56-111* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *56-111* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *20060505*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 5, 2006 has been entered.

Information Disclosure Statement

2. The references on the 1449 that have a strikethrough were previously cited on either a 1449 or 892. Therefore, the references have been considered previously, but are not included in this 1449 to avoid duplication.

WTIHDRAWN REJECTIONS

3. The claim objection of claim 73 of record in the Office Action mailed January 5, 2006, Pages 2-3 Paragraph 4, has been withdrawn due to Applicant's amendment in the Paper filed May 18, 2006.

4. The 35 U.S.C. 102 rejections of claims 74-80 as anticipated by Lue et al of record in the Office Action mailed January 5, 2006, Pages 3-4 Paragraph 6, have been withdrawn due to Applicant's amendments in the Paper filed May 18, 2006.

5. The 35 U.S.C. 103 rejections of claims 74-80 over Lue in view of Wong et al of record in the Office Action mailed January 5, 2006, Pages 5-7 Paragraph 9, have been withdrawn due to Applicant's amendments in the Paper filed May 18, 2006.

Claim Objections

6. Applicant is advised that should claims 69-72 be found allowable, claims 100-103 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 56-111 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lue et al (USPN 6,255,426) in view of Wong et al (USPN 6,358,457) and Takahashi et al (EP 982 362 A1).

Regarding claims 74-80, 87-99, 105-108, and 110-111, Lue et al anticipate a multilayer stretch film comprising at least two layers (col.12, l.17). At least one of the layers comprises a polyethylene copolymer having a CDBI of at least 70%, a melt index of from 0.1 to 15 g/10min, a density of from 0.910 to

0.930 g/ml, a melt index ratio of from 35 to 80, and an Mw/Mn ratio of from 2.5 to 5.5, wherein the film has a dart impact strength D, a modulus M, where M is the arithmetic mean of the machine direction and transverse direction 1% secant moduli, and a relation between D in g/mil and M in psi such that D is greater than or equal to $2.0x[100+e^{(11.71-0.000268xM+2.183x10^{-9}xM^2)}]$, which is equivalent to the formula claimed (see abstract and col.4, l.48-50 and l.60). The CDBI is at least 85% (col.9, l.43). The melt index is from 0.3 to 10 g/10min (col.4, l.57). The film is wrapped around articles when used as garbage and shopping bags or shrink film (col.10, l.57-59).

Lue et al fail to explicitly teach that the film has a particular natural draw ratio, and tensile stress at separate elongation values. Note the limitation "wherein the film has a natural draw ratio of at least 250%, 275%, or 300%, a tensile stress at the natural draw ratio of at least 22, 24, or 26MPa, and a tensile stress at second yield of at least 12MPa or 14MPa" does not require the film to actually be drawn or stretched, it merely states that the film has these properties. Wong et al teach that the natural stretch ratio is determined by factors such as the polymer composition, morphology caused by the process of forming the film (col.7, l.4-7). In this case, the film of Lue et al has the exact same composition and is made by

the same process. Lue et al teach that the film is used as a shrink film (col.10, l.57), which obviously must be stretched in order to allow the film to shrink.

Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made, since the film is formed of the same composition and made by the same process, would obviously have a natural draw ratio of the film of at least 300%, a tensile stress at the natural draw ratio of at least 26MPa, a tensile stress at the second yield of at least 14MPa, a tensile stress at first yield of at least 9MPa, and the film obviously has a yield plateau with a linear portion having a slope of at least 0.020 MPa per %elongation, as taught by Wong et al.

Lue et al and Wong et al combined fail to teach that at least one layer comprises one or more tackifiers. However, Takahashi et al teach that it is well known in the art to add tackifiers or cling additives such as low molecular weight polyisobutylene (PIB) in order to provide the packaging film with cling properties (p.34, l.51-55 and p.40, l.54-58). Therefore, one of ordinary skill in the art would have recognized that tackifiers such as PIB are added to at least one of the layers of the stretch film in order to provide the

packaging film with cling properties, as taught by Takahashi et al.

Thus, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to add a tackifier or cling agent such as PIB to the stretch film of Lue et al and Wong et al, in order to provide the stretch film with cling properties, as taught by Takahashi et al. Furthermore, with regard to claims 88-89 and 106-107, the tackifier or cling agents are added to the stretch film in an amount not detrimental to the improved film properties with regard to the stretch and wrap ability of the film, as taught by Takahashi et al on page 34, lines 51-55. Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to add the tackifier or cling agent to the layer within the claimed ranges in order to provide the film with cling properties without damaging the improved film properties, as taught by Takahashi et al. Regarding claims 110-111, the film obviously has a cling within the claimed range when PIB is added to at least one of the layers because the range is typical range for cling properties so that the film will properly cling to other objects.

Regarding claims 56-73, 81-86, 100-103, and 109, Lue et al in combination with Wong et al and Takahashi teach all of the

limitations as shown above with regard to claims 74-80, 87-99, 104-108, and 110-111. Takahashi et al also teach that it is well known that packaging films are formed from polyethylene copolymers as monolayer films or multilayer films (p.34, l.28-30). Takahashi et al also teach other layers are added to polyethylene copolymer films in order to provide additional properties, such as making one surface of the film tacky and the other non-tacky. Takahashi et al teach that in order to provide these properties two additional layers are used, one on either side, of the polyethylene copolymer film (p.34, l.31-39). One of ordinary skill in the art at the time Applicant's invention was made would have recognized that a layer is added on either side of a polyethylene copolymer film used in packaging in order to give that film one tacky surface and one non-tacky surface, as taught by Takahashi et al.

Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to form the film of Lue et al having more than one layer, as a three layered film with the polyethylene copolymer forming the intermediate layer, depending on the intended end result of the film, as taught by Takahashi et al.

ANSWERS TO APPLICANT'S ARGUMENTS

10. Applicant's arguments regarding the claim objection of claim 73 of record have been considered but are moot since the objection has been withdrawn.

11. Applicant's arguments regarding the 35 U.S.C. 102 rejections of claims 74-80 as anticipated by Lue have been considered but they are moot since the rejections have been withdrawn.

12. Applicant's arguments regarding the 35 U.S.C. 103 rejections of claims 74-80 over Lue in view of Wong have been considered but they are moot since the rejections have been withdrawn.

13. Applicant's arguments regarding the 35 U.S.C. 103 rejections of claims 56-73 and 81-83 over Lue in view of Wong and Takahashi have been fully considered but are not persuasive. In addition, arguments regarding the rejections of Lue and Wong that pertain to the rejection over Lue, Wong, and Takahashi will be answered below.

In response to Applicant's argument that the natural draw ratio and tensile stress are not obvious in Lue, Lue teaches

that the critical layer of the film is the polyethylene copolymer layer and therefore any other layers added to the film would not materially change the properties of the polyethylene copolymer, otherwise the film would not possess the characteristics desired by Lue. Therefore, in the same manner as the claimed invention, the layer of Lue that is not specifically a polyethylene copolymer, is selected so that it does not materially change the properties of the layer of the polyethylene copolymer. Once a reference teaching product appearing to be substantially identical is made the basis of a rejection, and the examiner presents evidence or reasoning tending to show inherency, the burden shifts to the applicant to show an unobvious difference.

In response to Applicant's argument that the suggestion to combine is not found within the references, Wong is used as a reference to teach why the film of Lue obviously meets the claimed limitations. Wong is not used to modify Lue, only to teach that Lue either already teaches the claimed limitations or that it would be obvious to one having ordinary skill in the art to change parameters of the composition and method to arrive at the different tensile stresses and draw ratios depending on the intended end result of the article.

In response to Applicant's argument that the Examiner has not assessed the claimed invention as a whole and instead has dissected the invention into its parts, it is agreed that using the invention itself as a roadmap to find its prior components would discount the value of combining various existing features or principles in a new way to achieve a new result. However, that is not the situation in this case. The Lue et al reference teaches the critical layer of the film and teaches that other layers are added to that critical layer to form a stretch film. The only "components" of the invention not taught by Lue et al are latent properties of the film. Mere recognition of latent properties such as the natural draw ratio and tensile stress of a known film does not render nonobvious an otherwise known invention. See MPEP 2145 II. Wong teaches that the natural stretch ratio is determined by factors such as the polymer composition, morphology caused by the process of forming the film (col.7, l.4-7), thereby showing that the draw ratio and tensile stress of a film are latent properties based on the composition and morphology of the film. Therefore, since Lue teaches the same composition and process of forming the critical layer of the film, the film must obviously possess the same natural draw ratio and tensile stress as the claimed film. Thus, the Examiner has not found the parts and declared the

invention obvious based on hindsight, but instead found the claimed film and shown that it would be obvious that the elements of the claimed invention that are not explicitly taught in Lue are latent properties of the film.

In response to Applicant's argument that the Examiner is asserting an "obvious to try" standard, Wong specifically teaches that the draw ratio is determined by factors such as the polymer composition and morphology caused by the process of forming the film and since the film of Lue has the same polymer composition and morphology it obviously has the same draw ratio and tensile stress. Furthermore, it would be obvious to one having ordinary skill in the art from the teaching of Wong that it is well known in the art to change factors such as the polymer composition and morphology in order to form different draw ratios depending on the intended end result of the article.

In response to Applicant's argument that Takahashi does not teach placing the critical layer as the core layer in the multi-layer film, Takahashi specifically teaches that the two additional layers are used, one on either side, of the polyethylene copolymer film (p.34, l.31-39). Therefore, teaching that the critical layer of the stretch film is used as the core layer.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Bruenjes whose telephone number is 571-272-1489. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher P Bruenjes
Examiner
Art Unit 1772

CPB CPB
July 5, 2006

HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

7/5/06